Abstract of the Invention

The subject invention is related to a method for removing bio-available phosphorus from animal waste and soil using an industrial byproduct from a metal manufacturing process. The byproduct is used to treat organic waste, such as animal waste and poultry litter, and immobilize bio-available phosphorus present in them. The byproduct is also used to treat organic waste to produce fertilizers, which are used to amend the soil and control the level of phosphorus present in the soil. The disclosed method strikes a balance between providing enough nutrients to the soil to grow crops, while preventing loss of phosphorus to surface water.